

Amendments to the Claims:

1. (Currently Amended) A process for culturing expanding a stem and/or progenitor cell population, comprising the step of culturing an input population of mesenchymal progenitor of non-hematopoietic stem and/or progenitor cells by non-static non-adherent suspension in serum-deprived nutrient medium.
2. (Currently Amended) [[A]] The process according to claim 1, wherein the input population comprises stem and/or progenitor cells having a CD45- phenotype.
3. (Cancelled)
4. (Currently Amended) [[A]] The process according to claim [[3]] 1, wherein the serum-deprived nutrient medium is supplemented with a factor selected from stem cell factor, interleukin-3 and a combination thereof.
5. (Currently Amended) [[A]] The process according to claim [[3]] 1, wherein the serum-deprived nutrient medium is supplemented with interleukin-3.
6. (Currently Amended) [[A]] The process according to claim [[3]] 1, wherein said input population further comprises a population of CD45+ stem and/or progenitor cells.
7. (Currently Amended) [[A]] The process according to any one of claims 1 to 6, wherein the input cell population is cultured for a period sufficient to expand the stem and/or progenitor cell population therein.
8. (Currently Amended) [[A]] The process for producing a differentiated non-hematopoietic cell, comprising the step of obtaining a stem and/or progenitor cell produced according to a process as defined in claim 1, and culturing said stem and/or progenitor cell under conditions conducive to the differentiation thereof.
9. (Currently amended) An isolated population of stem and/or progenitor cells having a CD45-/CD 123+ phenotype.

10. (Previously Presented) A population of stem and/or progenitor cells having a CD45-CD 123+ phenotype according to claim 9, wherein the cells are obtained by non-static non-adherent suspension culturing in serum-deprived nutrient medium.
11. (Currently amended) A cell culture composition comprising a ~~stem and/or mesenchymal~~ progenitor cell population in non-static, non-adherent suspension culture in serum-deprived nutrient medium.
12. (Previously Presented) The population of claim 11, wherein the stem and/or progenitor cells have a CD45-CD123+ phenotype.
13. (Currently Amended) The process of claim [[7]] 1, further comprising isolating the stem and/or progenitor cell population and admixing it with a pharmaceutically acceptable carrier.
14. (Previously Presented) A pharmaceutical formulation produced by the process of claim 13.
15. (Previously Presented) The process of any of claims 1-6, wherein the input cell population is derived from a tissue.
16. (Currently Amended) The process of claim [[15]] 1, wherein the input cell population is derived from a tissue [[is]] selected from the group consisting of bone marrow stroma, umbilical cord including Wharton's jelly, umbilical cord blood and placental blood, placenta, peripheral blood, skin, adipose tissue, and muscle.